

ABSTRACT OF THE DISCLOSURE

The present invention relates generally to permanent interconnections between electronic devices, such as integrated circuit packages, chips, wafers and printed circuit boards or substrates, or similar electronic devices. More particularly it relates to high-density electronic devices.

The invention describes means and methods that can be used to counteract the undesirable effects of thermal cycling, shock and vibrations and severe environment conditions in general.

For leaded devices, the leads are oriented to face the thermal center of the devices and the system they interact with.

For leadless devices, the mounting elements are treated or prepared to control the migration of solder along the length of the elements, to ensure that those elements retain their desired flexibility.

NOTE:

Please use Figure 72, Drawing Sheet 72 of 72 in conjunction with this Abstract